

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/026847

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01M4/92 H01M4/88 H01M8/10 C22C5/04 C22C3/00
B01J23/89 B01J23/42

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01M C22C B01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 469 514 A (N. E. CHEMCAT CORPORATION) 5 February 1992 (1992-02-05) P. 2, lines 43-52; P. 5, lines 21-26; Production Examples 2-4, 6, 7 & 9; Tables 1-4; Claims 1-6	1-17, 20, 21
X	EP 0 355 853 A (N. E. CHEMCAT CORPORATION) 28 February 1990 (1990-02-28) P. 3, lines 10-31; P. 6, lines 2-7; Production Example 3; Tables 1-4; Claims 1, 3, 10, 22, 24 & 29	1-17, 20, 21
X	EP 0 386 764 A (N. E. CHEMCAT CORPORATION) 12 September 1990 (1990-09-12) P. 3, lines 18-30; P. 6, lines 7-12; Production Examples 2-4, 13 & 17; Tables 1-4; Claims 1-7 & 12-18	1-5, 7-17, 20, 21
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

23 September 2005

Date of mailing of the international search report

06/10/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/008196 A1 (BASF AG) 9 January 2003 (2003-01-09) P. 1, paragraphs '0010!-'0011!; P. 2, paragraphs '0015!, '0027! & '0030!; P. 3, paragraph '0031!; Examples 1-3; Claims 1-3, 7 & 8	1-5, 9-21
Y	----- EP 0 827 225 A (N.E. CHEMCAT CORPORATION) 4 March 1998 (1998-03-04) P. 2, lines 51-57; P. 3, lines 3-18; P. 5, lines 14-54; Production Examples 1-5, 11, 13, 14, 38 & 39; Tables 1, 3-5 & 7; Claims 1-3, 11 & 14-16	1-71
Y	----- US 4 716 087 A (NIPPON ENGELHARD LTD.) 29 December 1987 (1987-12-29) Col. 2, line 63 - Col. 3, line 7; Col. 4, lines 7-45; Preparative Examples 2-4; Tables 1-4; Claims 1, 3, 4, 10, 11 & 15	1-71
A	----- PATENT ABSTRACTS OF JAPAN vol. 018, no. 209 (C-1190), 13 April 1994 (1994-04-13) & JP 06 007679 A (TANAKA KIKINZOKU KOGYO K.K.), 18 January 1994 (1994-01-18) abstract	1-71
A	----- PATENT ABSTRACTS OF JAPAN vol. 015, no. 334 (E-1104), 26 August 1991 (1991-08-26) & JP 03 127459 A (FUJI ELECTRIC CO. LTD.), 30 May 1991 (1991-05-30) abstract	1-71
A	----- GB 1 363 888 A (UNITED AIRCRAFT CORPORATION) 21 August 1974 (1974-08-21) P. 2, lines 44-69; Example II; Claims 1, 3, 4 & 6	1-71
A	----- F. EPRON ET AL.: "Influence of oxidizing and reducing treatments on the metal-metal interactions and on the activity for nitrate reduction of a Pt-Cu bimetallic catalyst" APPLIED CATALYSIS A: GENERAL, vol. 237, no. 1-2, November 2002 (2002-11), pages 253-261, XP004382301 ISSN: 0926-860X the whole document	1-8, 22-71

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/026847

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0469514	A	05-02-1992	DE 69102365 D1	14-07-1994
			DE 69102365 T2	17-11-1994
			JP 2909166 B2	23-06-1999
			JP 4087260 A	19-03-1992
			US 5178971 A	12-01-1993
EP 0355853	A	28-02-1990	DE 68908042 D1	09-09-1993
			DE 68908042 T2	16-12-1993
			JP 1967150 C	18-09-1995
			JP 2061961 A	01-03-1990
			JP 6097614 B	30-11-1994
			US 4970128 A	13-11-1990
			US 5096866 A	17-03-1992
EP 0386764	A	12-09-1990	DE 69002487 D1	09-09-1993
			DE 69002487 T2	16-12-1993
			JP 1967339 C	18-09-1995
			JP 2236960 A	19-09-1990
			JP 6097615 B	30-11-1994
			US 5024905 A	18-06-1991
US 2003008196	A1	09-01-2003	CA 2390299 A1	27-12-2002
			DE 10130828 A1	16-01-2003
			EP 1271682 A2	02-01-2003
			JP 2003086188 A	20-03-2003
EP 0827225	A	04-03-1998	CA 2214076 A1	26-02-1998
			JP 10069914 A	10-03-1998
			US 5876867 A	02-03-1999
US 4716087	A	29-12-1987	DE 3643332 A1	19-11-1987
			GB 2190537 A	18-11-1987
			JP 1801079 C	12-11-1993
			JP 5010979 B	12-02-1993
			JP 62269751 A	24-11-1987
JP 06007679	A	18-01-1994	NONE	
JP 03127459	A	30-05-1991	NONE	
GB 1363888	A	21-08-1974	CA 981326 A1	06-01-1976
			DE 2156005 A1	25-05-1972
			FR 2115394 A5	07-07-1972
			IT 941739 B	10-03-1973
			NL 7115807 A	23-05-1972
			SE 377511 B	07-07-1975